

Airborne Information for Lateral Spacing

AILS

Presented by Tom Doyle, Adsystem, Inc., NASA LaRC
to the Management Staff of Minneapolis-St. Paul Air Traffic
Control Facility on November 3, 1998.

With Hugh Bergeron, FAA Site Manager LaRC, AAR-210

AILS Research

AILS-----NASA/FAA

CSPA-----RTCA

CASPER-----Honeywell, Inc

Goal

Minimum Parallel Runway Separation to Conduct Independent Approaches

- Standard 4300 feet
- PRM 3400 feet

AILS goal---Minimum of 2500 feet between
runways

Objective

- To enable approaches to closely spaced parallel runways in IMC with a capacity similar to that obtained in VMC
- To provide the means for airborne flight crews to take responsibility for lateral aircraft separation during the approach

Technology

An accurate and reliable navigation system

- DGPS

An alerting and safety system

- ADS-B
- Algorithms

Developers and Supporters

- NASA
- FAA
- Honeywell, Inc.
- RTCA
- Airlines

Validation

- Workshop
- Monte Carlo Analysis
- Integration Flight Deck Simulation Studies
- Flight Tests
- Flight Demo

Why AILS

- Some airports loose capacity during IMC
- Costs to the airlines and the public

Plans

- On Going Development Activities
- April 1999-----Integration Flight Deck (IFD)
Simulation Study
- August 1999-----B757/G-4 Flight Test
- September 1999-----Flight Demo

Contacts and Other AILS Information

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Web Site: <http://ails.larc.nasa.gov/AILS.htm>